

ABSTRACT OF THE DISCLOSURE

In a transmission network including multiplex transmission units A, F, G, D and E, when the line breakage has occurred on the OC-12 transmission path of the direction from unit A to unit F, the unit F detects the signal coming in from the OC-12 path indicative of the line breakage. The unit F inserts the APS bytes which comes in from the unit A into the undefined area of the OC-192 transport overhead which is reserved for the through-transport of APS bytes, and transports it to the unit G. On receiving the through-transport APS bytes, the unit G inserts it intact into the defined area for the APS bytes in the OC-12 transport overhead, and sends it to the unit D. In this manner, protection switching between the units A and D is carried out.